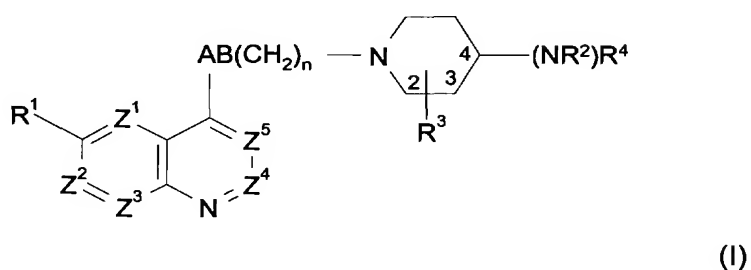


**Amendments to the claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of claims:**

1. (Currently amended) A compound of formula (I) or a pharmaceutically acceptable derivative salt and/or N-oxide thereof:



wherein:

one of Z<sup>1</sup>, Z<sup>2</sup>, Z<sup>3</sup>, Z<sup>4</sup> and Z<sup>5</sup> is N, one is CR<sup>1a</sup> and the remainder are CH, CH<sub>2</sub>, or one of Z<sup>1</sup>, Z<sup>2</sup>, Z<sup>3</sup>, Z<sup>4</sup> and Z<sup>5</sup> is CR<sup>1a</sup> and the remainder are CH;

R<sup>1</sup> and R<sup>1a</sup> are independently hydrogen; hydroxy; (C<sub>1-6</sub>)alkoxy optionally substituted by (C<sub>1-6</sub>)alkoxy, amino, piperidyl, guanidino or amidino any of which is optionally N-substituted by one or two (C<sub>1-6</sub>)alkyl, acyl or (C<sub>1-6</sub>)alkylsulphonyl groups, CONH<sub>2</sub>, hydroxy, (C<sub>1-6</sub>)alkylthio, heterocyclylthio, heterocycliloxy, arylthio, aryloxy, acylthio, acyloxy or (C<sub>1-6</sub>)alkylsulphonyloxy; (C<sub>1-6</sub>)alkoxy-substituted(C<sub>1-6</sub>)alkyl; halogen; (C<sub>1-6</sub>)alkyl; (C<sub>1-6</sub>)alkylthio; trifluoromethyl; trifluoromethoxy; nitro; azido; acyl; acyloxy; acylthio; (C<sub>1-6</sub>)alkylsulphonyl; (C<sub>1-6</sub>)alkylsulphoxide; arylsulphonyl; arylsulphoxide or an amino, piperidyl, guanidino or amidino group optionally N-substituted by one or two (C<sub>1-6</sub>)alkyl, acyl or (C<sub>1-6</sub>)alkylsulphonyl groups;

or when Z<sup>5</sup> is CR<sup>1a</sup>, R<sup>1a</sup> may instead be cyano, hydroxymethyl or carboxy;

or R<sup>1</sup> and R<sup>1a</sup> on adjacent positions may together form ethylenedioxy;

provided that when none of Z<sup>1</sup>, Z<sup>2</sup>, Z<sup>3</sup>, Z<sup>4</sup> and Z<sup>5</sup> is N, then R<sup>1</sup> is not hydrogen;

R<sup>2</sup> is hydrogen, or (C<sub>1-4</sub>)alkyl or (C<sub>2-4</sub>)alkenyl optionally substituted with 1 to 3 groups selected from:  
amino optionally substituted by one or two (C<sub>1-4</sub>)alkyl groups; carboxy; (C<sub>1-4</sub>)alkoxycarbonyl; (C<sub>1-4</sub>)alkylcarbonyl; (C<sub>2-4</sub>)alkenyloxycarbonyl; (C<sub>2-4</sub>)alkenylcarbonyl; aminocarbonyl wherein the amino group is optionally substituted by hydroxy, (C<sub>1-4</sub>)alkyl, hydroxy(C<sub>1-4</sub>)alkyl, aminocarbonyl(C<sub>1-4</sub>)alkyl, (C<sub>2-4</sub>)alkenyl, (C<sub>1-4</sub>)alkylsulphonyl, trifluoromethylsulphonyl, (C<sub>2-4</sub>)alkenylsulphonyl, (C<sub>1-4</sub>)alkoxycarbonyl, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>2-4</sub>)alkenyloxycarbonyl or (C<sub>2-4</sub>)alkenylcarbonyl; cyano; tetrazolyl; 2-oxo-oxazolidinyl optionally substituted by R<sup>10</sup>; 3-hydroxy-3-cyclobutene-1,2-dione-4-yl; 2,4-thiazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R<sup>10</sup>; 5-oxo-1,2,4-oxadiazol-3-yl; halogen; (C<sub>1-4</sub>)alkylthio; trifluoromethyl; hydroxy optionally substituted by (C<sub>1-4</sub>)alkyl, (C<sub>2-4</sub>)alkenyl, (C<sub>1-4</sub>)alkoxycarbonyl, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>2-4</sub>)alkenyloxycarbonyl, or (C<sub>2-4</sub>)alkenylcarbonyl; oxo; (C<sub>1-4</sub>)alkylsulphonyl; (C<sub>2-4</sub>)alkenylsulphonyl; ~~or~~ and (C<sub>1-4</sub>)aminosulphonyl wherein the amino group is optionally substituted by (C<sub>1-4</sub>)alkyl or (C<sub>2-4</sub>)alkenyl;

R<sup>3</sup> is in the 2-, 3- or 4-position and is trifluoromethyl or is in the 2-position and is oxo;  
or

R<sup>3</sup> is in the 3-position and is fluorine or amino wherein the amino group is optionally substituted by: hydroxy; (C<sub>1-6</sub>)alkylsulphonyl; trifluoromethylsulphonyl; (C<sub>2-6</sub>)alkenylsulphonyl; (C<sub>1-6</sub>)alkylcarbonyl; (C<sub>2-6</sub>)alkenylcarbonyl; (C<sub>1-6</sub>)alkoxycarbonyl; (C<sub>2-6</sub>)alkenyloxycarbonyl; (C<sub>1-6</sub>)alkyl; or (C<sub>2-6</sub>)alkenyl; wherein a (C<sub>1-6</sub>)alkyl or (C<sub>2-6</sub>)alkenyl moiety may be optionally substituted with up to 2 groups R<sup>12</sup> independently selected from:

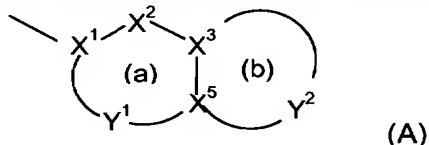
halogen; (C<sub>1-6</sub>)alkylthio; trifluoromethyl; cyano; carboxy; tetrazolyl; 2-oxo-oxazolidinyl; 3-hydroxy-3-cyclobutene-1,2-dione-4-yl; 2,4-thiazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R<sup>10</sup>; ~~or~~ 5-oxo-1,2,4-oxadiazol-3-yl; (C<sub>1-6</sub>)alkoxycarbonyl; (C<sub>1-6</sub>)alkylcarbonyl; (C<sub>2-6</sub>)alkenyloxycarbonyl; (C<sub>2-6</sub>)alkenylcarbonyl; hydroxy optionally substituted by (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>2-6</sub>)alkenylcarbonyl or aminocarbonyl wherein the amino group is optionally substituted by (C<sub>1-6</sub>)alkyl, or (C<sub>2-6</sub>)alkenyl; and amino optionally mono- or disubstituted by (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>2-6</sub>)alkenyloxycarbonyl, (C<sub>2-6</sub>)alkenylcarbonyl, (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>1-6</sub>)alkylsulphonyl, (C<sub>2-6</sub>)alkenylsulphonyl or aminocarbonyl wherein the amino group is optionally substituted by (C<sub>1-6</sub>)alkyl or (C<sub>2-6</sub>)alkenyl;

in addition when R<sup>3</sup> is disubstituted with a hydroxy or amino containing substituent and a carboxy containing substituent these may together form a cyclic ester or amide linkage, respectively;

R<sup>4</sup> is a group -U-R<sup>5</sup> where

U is selected from CO, SO<sub>2</sub> and CH<sub>2</sub> and

R<sup>5</sup> is an optionally substituted bicyclic carbocyclic or heterocyclic ring system (A):



containing up to four heteroatoms in each ring in which

ring (a) is aromatic and ring (b) is non-aromatic;

X<sup>1</sup> is C or N;

X<sup>2</sup> is N, NR<sup>13</sup>, O, S(O)<sub>x</sub>, CO or CR<sup>14</sup>;

X<sup>3</sup> and X<sup>5</sup> are independently N or C;

Y<sup>1</sup> is a 0 to 4 atom linker group each atom of which is independently selected from N, NR<sup>13</sup>, O, S(O)<sub>x</sub>, CO and CR<sup>14</sup>;

Y<sup>2</sup> is a 2 to 6 atom linker group, each atom of Y<sup>2</sup> being independently selected from N, NR<sup>13</sup>, O, S(O)<sub>x</sub>, CO, CR<sup>14</sup> and CR<sup>14</sup>R<sup>15</sup>;

each of R<sup>14</sup> and R<sup>15</sup> is independently selected from: H; (C<sub>1-4</sub>)alkylthio; halo; carboxy(C<sub>1-4</sub>)alkyl; halo(C<sub>1-4</sub>)alkoxy; halo(C<sub>1-4</sub>)alkyl; (C<sub>1-4</sub>)alkyl; (C<sub>2-4</sub>)alkenyl; (C<sub>1-4</sub>)alkoxycarbonyl; formyl; (C<sub>1-4</sub>)alkylcarbonyl; (C<sub>2-4</sub>)alkenyloxycarbonyl; (C<sub>2-4</sub>)alkenylcarbonyl; (C<sub>1-4</sub>)alkylcarbonyloxy; (C<sub>1-4</sub>)alkoxycarbonyl(C<sub>1-4</sub>)alkyl; hydroxy; hydroxy(C<sub>1-4</sub>)alkyl; mercapto(C<sub>1-4</sub>)alkyl; (C<sub>1-4</sub>)alkoxy; trifluoromethoxy; nitro; cyano; carboxy; amino or aminocarbonyl optionally substituted as for corresponding substituents in R<sup>3</sup>; (C<sub>1-4</sub>)alkylsulphonyl; (C<sub>2-4</sub>)alkenylsulphonyl;  $\alpha$ -aminosulphonyl wherein the amino group is optionally mono- or di-substituted by (C<sub>1-4</sub>)alkyl or (C<sub>2-4</sub>)alkenyl; aryl; aryl(C<sub>1-4</sub>)alkyl; and aryl(C<sub>1-4</sub>)alkoxy;

each R<sup>13</sup> is independently H; trifluoromethyl; (C<sub>1-4</sub>)alkyl optionally substituted by hydroxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkylthio, halo or trifluoromethyl; (C<sub>2-4</sub>)alkenyl; aryl; aryl (C<sub>1-4</sub>)alkyl; arylcarbonyl; heteroarylcarbonyl; (C<sub>1-4</sub>)alkoxycarbonyl; (C<sub>1-4</sub>)alkylcarbonyl; formyl; (C<sub>1-6</sub>)alkylsulphonyl; or aminocarbonyl wherein the amino group is optionally substituted by (C<sub>1-4</sub>)alkoxycarbonyl, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>2-4</sub>)alkenyloxycarbonyl, (C<sub>2-4</sub>)alkenylcarbonyl, (C<sub>1-4</sub>)alkyl or (C<sub>2-4</sub>)alkenyl and optionally further substituted by (C<sub>1-4</sub>)alkyl or (C<sub>2-4</sub>)alkenyl;

each x is independently 0, 1 or 2

n is 0 and AB is  $\text{NR}^{11}\text{CO}$ ,  $\text{CO-CR}^8\text{R}^9$ ,  $\text{CR}^6\text{R}^7\text{-CO}$ ,  $\text{NHR}^{11}\text{SO}_2$ ,  $\text{CR}^6\text{R}^7\text{-SO}_2$  or  $\text{CR}^6\text{R}^7\text{-CR}^8\text{R}^9$ , provided that  $\text{R}^8$  and  $\text{R}^9$  are not optionally substituted hydroxy or amino and  $\text{R}^6$  and  $\text{R}^8$  do not represent a bond;  
or n is 1 and AB is  $\text{NR}^{11}\text{CO}$ ,  $\text{CO-CR}^8\text{R}^9$ ,  $\text{CR}^6\text{R}^7\text{-CO}$ ,  $\text{NR}^{11}\text{SO}_2$ ,  $\text{CONR}^{11}$ ,  $\text{CR}^6\text{R}^7\text{-CR}^8\text{R}^9$ ,  $\text{O-CR}^8\text{R}^9$  or  $\text{NR}^{11}\text{-CR}^8\text{R}^9$ ;  
each of  $\text{R}^6$ ,  $\text{R}^7$ ,  $\text{R}^8$  and  $\text{R}^9$  is independently selected from: hydrogen;  $(\text{C}_{1-6})$ alkoxy;  $(\text{C}_{1-6})$ alkylthio; halo; trifluoromethyl; azido;  $(\text{C}_{1-6})$ alkyl;  $(\text{C}_{2-6})$ alkenyl;  $(\text{C}_{1-6})$ alkoxycarbonyl;  $(\text{C}_{1-6})$ alkylcarbonyl;  $(\text{C}_{2-6})$ alkenyloxycarbonyl;  $(\text{C}_{2-6})$ alkenylcarbonyl; hydroxy, amino or aminocarbonyl optionally substituted as for corresponding substituents in  $\text{R}^3$ ;  $(\text{C}_{1-6})$ alkylsulphonyl;  $(\text{C}_{2-6})$ alkenylsulphonyl; or and aminosulphonyl wherein the amino group is optionally substituted by  $(\text{C}_{1-6})$ alkyl or  $(\text{C}_{2-6})$ alkenyl;  
or when  $n=1$   $\text{R}^6$  and  $\text{R}^8$  together represent a bond and  $\text{R}^7$  and  $\text{R}^9$  are as above defined;  
or  $\text{R}^6$  and  $\text{R}^7$  or  $\text{R}^8$  and  $\text{R}^9$  together represent oxo;

$\text{R}^{10}$  is selected from  $(\text{C}_{1-4})$ alkyl;  $(\text{C}_{2-4})$ alkenyl and aryl any of which may be optionally substituted by a group  $\text{R}^{12}$  as defined above; carboxy; aminocarbonyl wherein the amino group is optionally substituted by hydroxy,  $(\text{C}_{1-6})$ alkyl,  $(\text{C}_{2-6})$ alkenyl,  $(\text{C}_{1-6})$ alkylsulphonyl, trifluoromethylsulphonyl,  $(\text{C}_{2-6})$ alkenylsulphonyl,  $(\text{C}_{1-6})$ alkoxycarbonyl,  $(\text{C}_{1-6})$ alkylcarbonyl,  $(\text{C}_{2-6})$ alkenyloxycarbonyl or  $(\text{C}_{2-6})$ alkenylcarbonyl and optionally further substituted by  $(\text{C}_{1-6})$ alkyl or  $(\text{C}_{2-6})$ alkenyl; and

$\text{R}^{11}$  is hydrogen; trifluoromethyl,  $(\text{C}_{1-6})$ alkyl;  $(\text{C}_{2-6})$ alkenyl;  $(\text{C}_{1-6})$ alkoxycarbonyl;  $(\text{C}_{1-6})$ alkylcarbonyl; or aminocarbonyl wherein the amino group is optionally substituted by  $(\text{C}_{1-6})$ alkoxycarbonyl,  $(\text{C}_{1-6})$ alkylcarbonyl,  $(\text{C}_{2-6})$ alkenyloxycarbonyl,  $(\text{C}_{2-6})$ alkenylcarbonyl,  $(\text{C}_{1-6})$ alkyl or  $(\text{C}_{2-6})$ alkenyl and optionally further substituted by  $(\text{C}_{1-6})$ alkyl or  $(\text{C}_{2-6})$ alkenyl;

or where one of  $\text{R}^3$  and  $\text{R}^6$ ,  $\text{R}^7$ ,  $\text{R}^8$  or  $\text{R}^9$  contains a carboxy group and the other contains a hydroxy or amino group they may together form a cyclic ester or amide linkage.

2. (Original) A compound according to claim 1 wherein  $\text{Z}^5$  is CH, C-Cl or N,  $\text{Z}^3$  is CH or CF and  $\text{Z}^1$ ,  $\text{Z}^2$  and  $\text{Z}^4$  are each CH, or  $\text{Z}^1$  is N,  $\text{Z}^3$  is CH and  $\text{Z}^2$  and  $\text{Z}^4$  are each CH and  $\text{Z}^5$  is CH or C-Cl.

3. (Previously presented) A compound according to claim 1 wherein  $R^1$  is methoxy and  $R^{1a}$  is H or when  $Z^3$  is  $CR^{1a}$  it may be C-F or when  $Z^5$  is  $CR^{1a}$  it may be C-F or C-Cl.
4. (Previously presented) A compound according to claim 1 wherein  $R^2$  is hydrogen, carboxymethyl, hydroxyethyl, aminocarbonylmethyl, ethoxycarbonylmethyl, ethoxycarbonylallyl or carboxyallyl.
5. (Previously presented) A compound according to claim 1 wherein  $R^3$  is  $CF_3$ , fluoro, oxo or amino unsubstituted or substituted by  $(C_{1-6})$ alkyl or  $(C_{2-6})$ alkenyl.
6. (Previously presented) A compound according to claim 1 wherein n is 0 and either A is  $CH_2$  or  $CHOH$  and B is  $CH_2$  or A is  $NH$  and B is  $CO$ .
7. (Previously presented) A compound according to claim 1 wherein  $-U-$  is  $-CH_2-$ .
8. (Currently Amended) A compound according to claim 1 wherein in the heterocyclic ring (A) ring (a) is selected from optionally substituted benzo and pyrido and  $Y^2$  has 3-5 atoms including a heteroatom bonded to  $X^5$  selected from  $NR^{13}$ , O or and S, where  $R^{13}$  is other than hydrogen, and  $NHCO$  bonded via N to  $X^3$ , or O or  $NH$  bonded to  $X^3$ .
9. (Currently Amended) A compound according to claim 1 wherein  $R^5$  is selected from:
  - 4H-benzo[1,4] oxazin-3-one-6-yl;
  - 4H-benzo[1,4] thiazin-3-one-6-yl;
  - 2,3-dihydro-[1,4]dioxino[2,3-c]pyridin-7-yl;
  - 3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl;
  - 3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-yl;
  - 7-chloro-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-yl; and
  - 7-chloro-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl.
10. (Currently amended) A compound according to claim 1 selected from:  
6-({2S,4S)-1-[(R)-2-Hydroxy-2-(6-methoxy-[1,5]naphthyridin-4-yl)ethyl]-2-(trifluoromethyl)piperidin-4-ylamino)methyl)-4H-benzo[1,4]thiazin-3-one;

6-({(3*R*,4*S*)-1-[(*R*)-2-Hydroxy-2-(6-methoxy-[1,5]naphthyridin-4-yl)ethyl]-3-(trifluoromethyl)piperidin-4-ylamino)methyl)-4*H*-benzo[1,4]thiazin-3-one;  
6-({1-[(*R*)-2-Hydroxy-2-(6-methoxy-[1,5]naphthyridin-4-yl)ethyl]-4-(trifluoromethyl)piperidin-4-ylamino)methyl)-4*H*-benzo[1,4]thiazin-3-one;  
6-({1-[(*R*)-2-Hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]-2-oxopiperidin-4-ylamino)methyl)-4*H*-benzo[1,4]thiazin-3-one;  
6-[({(3*S*,4*R*)-3-Fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-benzo[1,4]thiazin-3-one and 6-[({(3*R*,4*S*)-3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-benzo[1,4]thiazin-3-one ;  
6-({cis-3-Fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one Diastereoisomer 1 ;  
6-({cis-3-Fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]-piperidin-4-ylamino)-methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one Diastereoisomer 2 ;  
7-Chloro-6-({cis 3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one Diastereoisomer 1 ;  
7-Chloro-6-({cis-3-Fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one Diastereoisomer 2 ;  
6-({cis-3-Fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]oxazin-3-one Diastereoisomer 1 ;  
6-({cis-3-Fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]oxazin-3-one Diastereoisomer 2 ;  
7-Chloro-6-[({(3*S*,4*R*)-3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one and 7-chloro-6-[({(3*R*,4*S*)-3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one ;  
7-Fluoro-6-[({(3*S*,4*R*)-3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one and 7-fluoro-6-[({(3*R*,4*S*)-3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;  
7-({(3*S*,4*R*)-3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-1*H*-pyrido[2,3-*b*][1,4]thiazin-2-one and 7-({(3*R*,4*S*)-3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-1*H*-pyrido[2,3-*b*][1,4]thiazin-2-one;  
7-Chloro-6-[({(3*S*,4*R*)-3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]oxazin-3-one and 7-chloro-6-[({(3*R*,4*S*)-3-fluoro-1-[(*R*)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]oxazin-3-one;

6-(((3S,4S)-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one and 6-(((3R,4R)-3-fluoro-1-[(R)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one;

6-(((3S,4S)-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]oxazin-3-one and 6-(((3R,4R)-3-fluoro-1-[(R)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]oxazin-3-one;

7-Fluoro-6-(((3S,4S)-3-fluoro-1-[(R)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one and 7-Fluoro-6-(((3R,4R)-3-fluoro-1-[(R)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one;

6-(((3S,4S)-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-1H-pyrido[2,3-b][1,4]thiazin-3-one and 6-(((3R,4R)-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-1H-pyrido[2,3-b][1,4]thiazin-3-one;

6-((cis-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]oxazin-3-one Diastereoisomer 1;

6-((cis-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]oxazin-3-one Diastereoisomer 2;

6-((cis-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one Diastereoisomer 1;

6-((cis-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one Diastereoisomer 2;

7-Chloro-6-((cis-3-fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]oxazin-3-one Diastereoisomer 1;

7-Chloro-6-((cis-3-fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]oxazin-3-one Diastereoisomer 2;

6-((cis-3-Fluoro-1-[(R)-2-hydroxy-2-(8-fluoro-6-methoxy-quinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]oxazin-3-one Diastereoisomer 1;

6-((cis-3-Fluoro-1-[(R)-2-hydroxy-2-(8-fluoro-6-methoxy-quinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one Diastereoisomer 1;

6-(((3R,4S)-1-[2-(3-Chloro-6-methoxy-quinolin-4-yl)-ethyl]-3-fluoro-piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one and 6-(((3S,4R)-1-[2-(3-Chloro-6-methoxy-quinolin-4-yl)-ethyl]-3-fluoro-piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one;

6-(((3R,4S)-3-Fluoro-1-[2-(6-methoxy-[1,5]naphthyridin-4-yl)-ethyl]-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one and 6-(((3S,4R)-3-fluoro-1-[2-(6-methoxy-[1,5]naphthyridin-4-yl)-ethyl]-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one;

6-(((3S,4R)-3-Fluoro-1-[(S)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one and 6-(((3R,4S)-3-fluoro-1-[(S)-2-hydroxy-2-(6-methoxyquinolin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one;

6-(((3R,4S)-1-[2-(2,3-Dihydro-[1,4]dioxino[2,3-f]quinolin-10-yl)-ethyl]-3-fluoro-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one and 6-(((3S,4R)-1-[2-(2,3-dihydro-[1,4]dioxino[2,3-f]quinolin-10-yl)-ethyl]-3-fluoro-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one;

6-(((3R,4S)-1-[2-(6,8-Difluoro-quinolin-4-yl)-ethyl]-3-fluoro-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one and 6-(((3S,4R)-1-[2-(6,8-difluoro-quinolin-4-yl)-ethyl]-3-fluoro-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one;

6-(((3S,4R)-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-benzo[1,4]thiazin-3-one and 6-(((3R,4S)-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-benzo[1,4]thiazin-3-one;

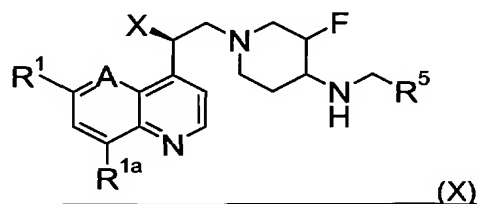
6-(((cis-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-benzo[1,4]thiazin-3-one Faster running Diastereoisomer;

6-(((cis-3-Fluoro-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin-4-yl)-ethyl]piperidin-4-ylamino)methyl)-4H-benzo[1,4]thiazin-3-one Slower-running Diastereoisomer;

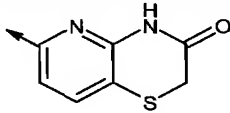
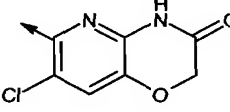
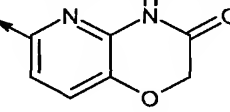
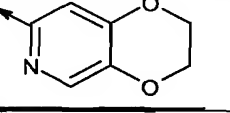
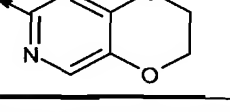
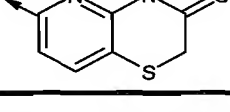
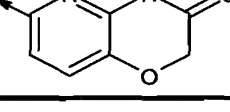
6-((2S,4S)-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin-4-yl)ethyl]-2-(trifluoromethyl)piperidin-4-ylamino)methyl)-4H-pyrido[1,4]thiazin-3-one ;

6-((2S,4R)-1-[(R)-2-hydroxy-2-(6-methoxy-[1,5]naphthyridin-4-yl)ethyl]-2-(trifluoromethyl)piperidin-4-ylamino)methyl)-4H-pyrido[1,4]thiazin-3-one;

and the following tabulated compounds of formula (X):





<u>Isomeric form</u>	<u>A</u>	<u>R<sup>1</sup></u>	<u>R<sup>1a</sup></u>	<u>X</u>	<u>R<sup>5</sup></u>
<u>Enantiomer 2</u>	<u>CH</u>	<u>MeO</u>	<u>F</u>	<u>OH</u>	<u>6-[4H-pyrido[3,2-b][1,4]thiazin-3-one]</u> 
<u>Enantiomer 1</u>	<u>CH</u>	<u>MeO</u>	<u>F</u>	<u>OH</u>	<u>6-[7-chloro-4H-pyrido[3,2-b][1,4]oxazin-3-one]</u> 
<u>Enantiomer 2</u>	<u>CH</u>	<u>MeO</u>	<u>F</u>	<u>OH</u>	<u>6-[4H-pyrido[3,2-b][1,4]oxazin-3-one]</u> 
<u>Enantiomer 2</u>	<u>CH</u>	<u>MeO</u>	<u>H</u>	<u>OH</u>	<u>7-[2,3-dihydro-[1,4]dioxino[2,3-c]pyridine]</u> 
<u>Enantiomer 1</u>	<u>CH</u>	<u>MeO</u>	<u>H</u>	<u>OH</u>	<u>7-[2,3-dihydro-[1,4]dioxino[2,3-c]pyridine]</u> 
<u>Enantiomer 2</u>	<u>N</u>	<u>MeO</u>	<u>H</u>	<u>H</u>	<u>6-[4H-pyrido[3,2-b][1,4]thiazin-3-one]</u> 
<u>Racemic</u>	<u>CH</u>	<u>F</u>	<u>F</u>	<u>H</u>	<u>6-[4H-pyrido[3,2-b][1,4]oxazin-3-one]</u> 

or a pharmaceutically acceptable ~~derivative~~ salt and/or N-oxide thereof.

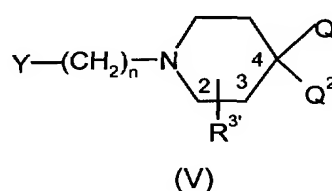
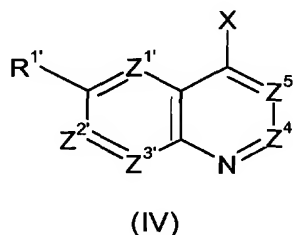
11. (Currently amended) A method of treatment of bacterial infections in mammals, ~~particularly in man~~, which method comprises the administration to a mammal in need of such treatment an effective amount of a compound according to claim 1.

Claims 12 and 13 (Cancelled).

14. (Original) A pharmaceutical composition comprising a compound according to claim 1, and a pharmaceutically acceptable carrier.

Claims 15 and 16 (Cancelled).

17. (Currently amended) A process for preparing a compound of formula (I) according to claim 1, or a pharmaceutically acceptable ~~derivative salt and/or N-oxide~~ thereof, which process comprises reacting a compound of formula (IV) with a compound of formula (V):

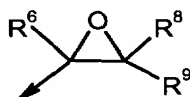


wherein  $n$  is as defined in formula (I);  $Z^{1'}$ ,  $Z^{2'}$ ,  $Z^{3'}$ ,  $Z^{4'}$ ,  $Z^{5'}$ ,  $R^{1'}$ , and  $R^{3'}$  are  $Z^1$ ,  $Z^2$ ,  $Z^3$ ,  $Z^4$ ,  $Z^5$ ,  $R^1$ , and  $R^3$  are as defined in formula (I) or groups convertible thereto;  $Q^1$  is  $NR^{2'}R^{4'}$  or a group convertible thereto wherein  $R^{2'}$  and  $R^{4'}$  are  $R^2$  and  $R^4$  as defined in formula (I) or groups convertible thereto and  $Q^2$  is H or  $R^{3'}$  or  $Q^1$  and  $Q^2$  together form an optionally protected oxo group;

- (i) X is A'-COW, Y is H and  $n$  is 0;
- (ii) X is  $CR^6=CR^8R^9$ , Y is H and  $n$  is 0;
- (iii) X is oxirane, Y is H and  $n$  is 0;
- (iv) X is  $N=C=O$  and Y is H and  $n$  is 0;
- (v) one of X and Y is  $CO_2R^Y$  and the other is  $CH_2CO_2R^X$ ;
- (vi) X is  $CHR^6R^7$  and Y is  $C(=O)R^9$ ;
- (vii) X is  $CR^7=PR^{Z_3}$  and Y is  $C(=O)R^9$  and  $n=1$ ;
- (viii) X is  $C(=O)R^7$  and Y is  $CR^9=PR^{Z_3}$  and  $n=1$ ;
- (ix) Y is COW and X is  $NHR^{11'}$  or  $NR^{11'}COW$  and  $n=0$  or 1 or when  $n=1$  X is COW and Y is  $NHR^{11'}$  or  $NR^{11'}COW$ ;
- (x) X is  $NHR^{11'}$  and Y is  $C(=O)R^8$  and  $n=1$ ;
- (xi) X is  $NHR^{11'}$  and Y is  $CR^8R^9W$  and  $n=1$ ;
- (xii) X is  $NR^{11'}COCH_2W$  or  $NR^{11'}SO_2CH_2W$  and Y is H and  $n=0$ ;
- (xiii) X is  $CR^6R^7SO_2W$  and Y is H and  $n=0$ ;
- (xiv) X is W or OH and Y is  $CH_2OH$  and  $n$  is 1;
- (xv) X is  $NHR^{11'}$  and Y is  $SO_2W$  or X is  $NR^{11'}SO_2W$  and Y is H, and  $n$  is 0;

(xvi) X is W and Y is CONHR<sup>11'</sup>;

in which W is a leaving group, ~~e.g. halo or imidazolyl~~; R<sup>X</sup> and R<sup>Y</sup> are (C<sub>1-6</sub>)alkyl; R<sup>Z</sup> is aryl or (C<sub>1-6</sub>)alkyl; A' and NR<sup>11'</sup> are A and NR<sup>11</sup> as defined in formula (I), or groups convertible thereto; and oxirane is:



wherein R<sup>6</sup>, R<sup>8</sup> and R<sup>9</sup> are as defined in formula (I);

and thereafter optionally or as necessary converting Q<sup>1</sup> and Q<sup>2</sup> to NR<sup>2'</sup>R<sup>4'</sup>;

converting A', Z<sup>1'</sup>, Z<sup>2'</sup>, Z<sup>3'</sup>, Z<sup>4'</sup>, Z<sup>5'</sup>, R<sup>1'</sup>, R<sup>2'</sup>, R<sup>3'</sup>, R<sup>4'</sup> and ~~NR<sup>11'</sup>~~ to NR<sup>11'</sup> to A, Z<sup>1</sup>,

Z<sup>2</sup>, Z<sup>3</sup>, Z<sup>4</sup>, Z<sup>5</sup>, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and NR<sup>11</sup>; converting A-B to other A-B,

interconverting R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and/or R<sup>4</sup>, and/or forming a pharmaceutically acceptable

~~derivative~~ salt and/or N-oxide thereof.

18. (New) A compound according to claim 1 wherein R<sup>3</sup> is fluoro.